

1. A method of authenticating a transaction, comprising the steps of:  
2 connecting a card reader unit to a device having a keypad and display;  
initiating a transaction request using the device;  
4 communicating the transaction request to a third party through the device; and  
receiving a signal at the device to authenticate the transaction.
2. The method of claim 1, wherein the portable card reader unit is capable of  
2 reading a smartcard.
3. The method of claim 1, wherein the portable card reader unit is capable of  
2 reading an optical card.
4. The method of claim 1, wherein the device is a personal digital assistant  
2 (PDA).
5. The method of claim 1, wherein the device is a telephone.
6. The method of claim 5, wherein the telephone is a cellular telephone.
7. The method of claim 1, wherein the signal used to authenticate the  
2 transaction is a high-contrast optical signal.
8. The method of claim 1, wherein the step of communicating the transaction  
2 request to a device or third party involves the use of a dual-tone audio signal.
9. The method of claim 8, wherein the signal is a dual-tone, multi-format  
2 (DTMF) signal.
10. The method of claim 8, wherein the signal is an audio frequency shift

2     keying (AFSK) signal.

11.     The method of claim 8, wherein the signal is a private line (PL) signal.

2     12.     The method of claim 1, wherein the step of initiating a transaction request  
2     at the card reader unit includes the entry of a personal identification number (PIN)  
through the keyboard of the device.

2     13.     The method of claim 12, wherein the operation of the portable card reader  
2     unit is terminated if a PIN entry is attempted more than a predetermined number of times.

2     14.     The method of claim 1, wherein:  
2     the card reader unit further includes a biometric input; and  
the step of initiating a transaction request at the card reader unit includes the  
4     receipt of biometric data through the biometric input.

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15.     The method of claim 14, wherein the biometric input is a fingerprint.

2     16.     The method of claim 1, wherein the transaction request, authentication  
2     signal, or both are encrypted.

2     17.     The method of claim 16, wherein the encryption is based on public-key  
2     cryptography.

2     18.     The method of claim 1, wherein:  
2     the card reader or device includes a memory;  
the transaction request and authentication signal constitute a session; and  
4     information regarding the session is stored in the memory.